

Eureka Math

4th Grade Module 1 Lesson 10

At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this project!

Directions for customizing presentations are available on the next slide.



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Icons



Read, Draw, Write



Learning Target



Personal White Board



Problem Set



Manipulatives Needed



Fluency



Think Pair Share



Whole Class



Individual



Partner



Small Group



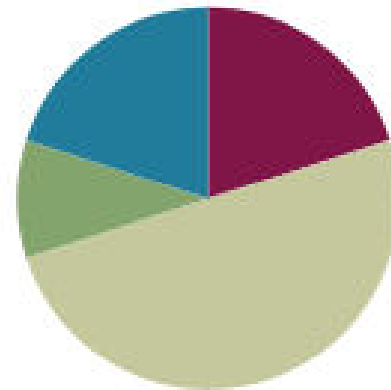
Small Group Time

Lesson 10

Objective: Use place value understanding to round multi-digit numbers to any place value using real world applications.

Suggested Lesson Structure

■ Fluency Practice	(12 minutes)
■ Application Problem	(6 minutes)
■ Concept Development	(30 minutes)
■ Student Debrief	(12 minutes)
Total Time	(60 minutes)





I can use place value understanding to round multi-digit numbers to any place value using real world applications.



Sprints

Follow sprint protocol



Multiply by 10

$$10 \times 10 = \underline{\hspace{2cm}}$$

$$1 \text{ ten} \times 10 \underline{\hspace{2cm}}$$

$$\underline{\hspace{1cm}} \text{ ten} \times \underline{\hspace{1cm}} \text{ ten}$$

$$1 \text{ ten} \times 50 = \underline{\hspace{2cm}}$$

$$1 \text{ ten} \times 80 = \underline{\hspace{2cm}} \text{ hundreds}$$

$$1 \text{ ten} \times \underline{\hspace{2cm}} = 600$$



Application Problem

The post office sold 204,789 stamps last week and 93,061 stamps this week. About how many more stamps did the post office sell last week than this week? Explain how you got your answer.



Rounding to multiple units

935,292

- Round to the nearest hundred thousand _____
- Round to the nearest ten thousand _____
- What changes about the numbers when rounding to smaller and smaller units? Discuss with your partner.



Best estimate to solve word problems.

In the year 2012, there were 935,292 visitors to the White House.

Let's assume that each visitor gets a White House map. Predict the number of maps the White House needs for visitors in 2013.

Discuss with your partner how found your answer.



Best estimate to solve word problems.

In the year 2011, there were 998,250 visitors to the White House.

How does this information change your estimate, or does it?



Choose a unit of round to solve problems.

2,837 students attended Lincoln Elementary school.

Discuss with your partner how you would estimate how many chairs the school needs.

Compare the effect of rounding to the largest unit to the smallest unit.

Does your estimate make sense?



Problem Set

1 2 3 4 5

Problem Set

A STORY OF UNITS

Lesson 10 Problem Set

4•1

Name _____

Date _____

1. Round 543,982 to the nearest

a. thousand: _____.

b. ten thousand: _____.

c. hundred thousand: _____.

2. Complete each statement by rounding the number to the given place value.

a. 2,841 rounded to the nearest hundred is _____.

b. 32,851 rounded to the nearest hundred is _____.

c. 132,891 rounded to the nearest hundred is _____.

d. 6,299 rounded to the nearest thousand is _____.



Debrief

- In problem 3, why didn't rounding to the nearest hundred work? Would rounding to the nearest thousand have worked better? What does this show about rounding?
- When estimating, how do you choose to which unit you will round? Would it have been more difficult to solve problem 5 if you rounded both numbers to the hundreds? Why or why not?
- In problem 1, how do your estimates compare?
- How do you choose a best estimate? What is the advantage of rounding to smaller and larger units?

Exit Ticket

Name _____

Date _____

1. There are 598,500 Apple employees in the United States.
 - a. Round the number of employees to the given place value.

thousand: _____

ten thousand: _____

hundred thousand: _____

- b. Explain why two of your answers are the same.